

-continued

Component	Wt. %
Sodium C <sub>13</sub> linear alkylbenzenesulfonate	7.4
Sodium C <sub>14</sub> -C <sub>15</sub> alkylsulfate	7.4
C <sub>12</sub> -C <sub>13</sub> alkylpolyethoxylate (2.5)	1.5
Sodium Silicate	4.7
Sodium Carbonate	17.3
Builder	31.5
Dispersing/Anti-redeposition Agent	2
Sodium Diethylene Triamine Penta Acetate (DTPA)	1
Chelating Agent (Optional)	
Sodium Sulfate, Water and Minors	Balance to 100%

Artificially soiled 5"×5" fabrics representing a range of typical consumer stains are washed in a mini-washer using two gallons of aqueous washing solution as hereinbefore described. Each such treatment employs a different combination of builder, dispersing/anti-redeposition agent and/or chelating agent as set forth in the following table:

Treatment No.	Builder	Dispersing/Anti-Redeposition Agent	Chelant
1	TMS/TDS <sup>A</sup>	None	None
2	TMS/TDS	50/50 Mixture of PC2 <sup>B</sup> and PEA <sub>189</sub> E <sub>15</sub> <sup>C</sup>	None
3	TMS/TDS	50/50 Mixture of PC2 and PEA <sub>189</sub> E <sub>15</sub>	DTPA <sup>D</sup>
4	TMS/TDS	None	DTPA
5	STPP <sup>E</sup>	None	None

<sup>A</sup>Mixture of tartrate monosuccinate and tartrate disuccinate in a TMS to TDS weight ratio of 80/20, sodium salt form

<sup>B</sup>Polyacrylic acid, average molecular weight about 4500, as sodium salt

<sup>C</sup>Ethoxylated tetraethylenepentamine having a molecular weight prior to ethoxylation of about 189 and a degree of ethoxylation of about 15

<sup>D</sup>Sodium diethylenetriaminepentaacetate

<sup>E</sup>Sodium tripolyphosphate

Test fabrics are washed with these treatment solutions in wash water of 98° F. and rinsed in water at 70° F. Water hardness is 12 grains/gallon. Clean white cotton terry cloths are added as ballast fabrics to realize a test fabric weight of 300 grams per treatment. All fabrics are subsequently dried in mini-dryers.

Three replicates of each such treatment are conducted. A balanced complete block paired comparison test design provides for the fabrics representing each stain type for a given treatment to be viewed relative to the other treatments. Stain removal is graded by expert graders. Each grader provides numerical cleaning difference grades on a nine point scale (-4 through +4) for each comparison.

Treatment means are calculated and are listed in the table hereinafter after normalization of the means based on a zero value for treatment number one (TMS/TDS alone).

Soils	Panel Score Units Treatment No.					LSD <sup>A</sup>
	1	2	3	4	5	
Clay on Cotton	0.0	1.7*	1.6*	-0.1	1.4	1.52
Clay on Poly-cotton	0.0	2.6*	2.6*	0.2	1.4*	1.03
Grass on Poly-cotton	0.0	0.7	0.6	0.1	0.5	1.36
Tea on Poly-cotton	0.0	0.6	1.0*	0.8	0.9*	0.92
Spaghetti Sauce on Poly-cotton	0.0	0.4	0.3	-0.4	-1.4*	1.03
Bacon Grease on Cotton	0.0	-0.2	-0.0	0.2	-1.1*	0.48

	Soils	Panel Score Units Treatment No.					LSD <sup>A</sup>
		1	2	3	4	5	
5	Animal Blood on Cotton	0.0	1.2*	1.5*	0.6*	1.0*	0.55
	Poly-cotton Anti-redeposition Swatch	0.0	3.9*	4.3*	0.2	1.9*	0.81
10	Cotton Anti-redeposition Swatch	0.0	1.2	1.2	0.3	-0.8	1.38
	Facial Soil on Poly-cotton	0.0	0.7*	0.7*	0.1	-0.3	0.49

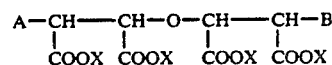
<sup>A</sup>Least significant difference at 95% confidence level

\*Indicates value is significantly different than Treatment 1, a plus value indicating improved stain removal.

What is claimed is:

1. A detergent builder composition especially useful in phosphorus-free detergent or laundry additive products, said composition comprising:

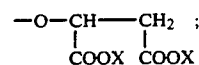
(A) from about 70% to 99% by weight of one or more of an ether carboxylate sequestering agent having the formula:



wherein

A is H or OH;

B is H or

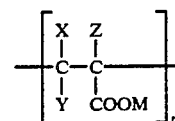


and

X is H or a salt-forming cation; and

(B) from about 1% to 30% by weight of a dispersing-/anti-redeposition agent selected from the group consisting of:

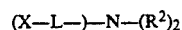
(i) polycarboxylates which are polymers or copolymers which contain at least about 60% by weight of segments having the general formula:



wherein X, Y and Z are, independently, selected from hydrogen, methyl, carboxy, carboxymethyl, hydroxy and hydroxymethyl; M is H or a salt-forming cation and n ranges from about 30 to about 400; and

(ii) combinations of said polycarboxylates with ethoxylated amine material selected from the group consisting of

(a) ethoxylated monoamines having the formula:



(b) ethoxylated diamines having the formula: